Update Ping Test Plan

Overview

We want to be able to roll out new versions progressively to specific numbers of people. Right now we do this by throttling the updates for a period of time. It would be faster and better to do a 100% update until we get the target number of people and then cut it off.

We want to be able to understand how many users re-install Firefox with the installer rather than using the updater (e.g. go from Firefox 51 to 52 by re-installing it). .

Purpose

Give a clear, low latency, signal of a Firefox update: the data must be available within minutes from a client update.

References / Implementation details:

- Tracking bug: [1351397](#)
- Implementation tracking bug: [1120372](#)
- [PRD](#)
- [Ping Structure](#)

```
{
  type: "update",
  id: <UUID>, // a UUID that identifies this ping
  creationDate: <ISO date>
  version: 4,

  application: {
    architecture: <string>, // build architecture, e.g. x86
    buildId: <string>, // "20141126041045"
    name: <string>, // "Firefox"
    version: <string>, // "35.0"
    displayVersion: <string>, // "35.0b3"
    vendor: <string>, // "Mozilla"
```

```
    platformVersion: <string>, // "35.0"
    xpcomAbi: <string>, // e.g. "x86-msvc"
    channel: <string>, // "beta"
  },

  clientId: <UUID>,
  environment: { ... }, // content documented here
  payload: {
    reason: <string>,
    previousChannel: <string>,
    previousVersion: <string>,
    previousBuildId: <string>,
    targetChannel: <string>,
    targetVersion: <string>,
    targetBuildId: <string>,
  },
}
```

- Schedule

The ping will be sent in the following cases:

- When an update is ready, before Firefox restarts to apply it.
  - For existing profiles: this ping is scheduled as soon as the package is downloaded, but not earlier than 60s from the browser startup.
  - For new profiles (no pending update ready from other profiles): we hold back the 'new-profile' ping for 30 minutes to allow users to disable Telemetry (complying to legal requests). We should do the same for the 'update' ping.
- After an update is successfully applied with the profile which initiated the update, when Firefox is restarted.
  - This will be sent after 60s from the Firefox startup.
- Any time a profile is used with a newer version without an update being performed with that profile (version-update).
  - On systems with multiple-profiles, we will also send a ping when profiles other than the one the update took place in are started.
  - After a newer version is installed over a previous, older one, when Firefox is started and an existing profile is used.
  - In both cases, this will be sent after 60s from the Firefox startup.

Entry Criteria

- QA has access to [PRD](#) and instructions (from bugs)
- The feature has landed in Nightly

Current Status

In Nightly

Exit Criteria

- All related bugs triaged
- All blockers fixed
- All resolved bugs verified by QA
- Found-fixed bugs rate going down in time

What's in scope?

- Ping sending after firefox updates
- The timing of ping sending (after downloading updates)
- Testing ping sending correlated with user set data sending choices
- The ping structure

What's out of scope?

- Ping sending after firefox updates
- The timing of ping sending after installing and restarting the browser

Test Strategy

- Test Execution Schedule

Project phase	Start Date	End Date
Start project	28.03.2017	
Study PRD/mocks received	28.07.2017	
QA - Test plan creation	28.07.2017	
QA - Test cases preparation	28.07.2017	
QA - Test cases execution	30.07.2017 - 02.08.2017	
Release Date	-	

- Test cases:

Prerequisite:
toolkit.telemetry.updatePing.enabled set to true

Check the general format of a sent update ping:
1. Check that the ping type is correctly displayed
2. Check that creationDate is correctly generated
3. Check that platform information are correctly displayed. (Architecture, buildId, Name etc)
4. Check that reason field is correctly displayed
   a. *payload.reason* - depending on the reason why the ping was generated and sent:
      i.   "ready" - the ping was generated after the update package was downloaded;
      ii. "success" - the ping was generated after Firefox restarted to apply the update and the update was correctly applied;

iii. "profile-upgrade" - the ping was generated on systems with multiple profiles, if an update was applied with a different profile, and the current profile starts with a new version of firefox; this is also triggered when Firefox is re-installed to perform an update;

b. *payload.previousChannel* - the Firefox channel before the update was applied (only valid for pings with reason *"success"*).

c. *payload.previousVersion* - the Firefox version before the update was applied. Follows the same format a *application.version* (only valid for pings with reason *"success"*)..

d. *payload.previousBuildId* - the Firefox build id before the update was applied. Follows the same format a *application.buildId* (only valid for pings with reason *"success"*)..

e. *payload.targetChannel* - the Firefox channel we're updating to (only valid for pings with reason *"ready"*).

f. *payload.targetVersion* - the Firefox version we're updating to (only valid for pings with reason *"ready"*).

g. *payload.targetBuildId* - the Firefox build id we're updating to (only valid for pings with reason *"ready"*).

5. Check that Environment section has the correct structure. (as documented in https://gecko.readthedocs.io/en/latest/toolkit/components/telemetry/telemetry/data/environment.html)

6. Verify the general format of an update ping against the ping schema

Ping Sending:

1. For an existing profile, check if the update ping is sent when an update is ready, before Firefox restarts to apply it, but not earlier than 60s from the browser startup.

2. For a new profile(no pending update ready from other profiles), update profile is sent only after 30 mins in order to allow users to disable Telemetry

3. Check that an update ping is sent after an update is successfully applied with the profile which initiated the update, when Firefox is restarted.This will be sent after 60s from the Firefox startup.

4. Check that update ping is sent any time a profile is used with a newer version of Firefox without an update being performed with that profile

5. Check that if you have multiple-profiles, we will also send an update ping when profiles other than the one the update took place in are started.This will be sent after 60s from the Firefox startup.

6. Check that update ping is sent after a newer version is installed over a previous, older one, when Firefox is started and an existing profile is used.This will be sent after 60s from the Firefox startup.

7. Check that an update ping is not sent in any way if firefox version is not updated(restart, shut down, etc).

8. FHR enabled\disabled - need Dexter's input

Test Results:

LINK